

OIL ANALYSIS REPORT

VOLVO PENTA

MR WEIR CUMMINS 74171220 - STARBOARD DIESEL ENGINE

Sample No: VPA045573

Oil Type: SHELL ROTELLA T4 15W40

SAMPLE INFORMATION

Sample Number	VPA045573	VPA056024	---	---
Sample Date	09 Jan 2024	03 Mar 2023	---	---
Machine Hours	237	195	---	---
Oil Hours	237	0	---	---
Oil Changed	N/A	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

OIL CONDITION

Visc @ 100°C	cSt	█ 14.8	█ 14.9	---	---
Base Number (BN)	mg KOH/g	█ 8.6	█ 9.2	---	---
Oxidation (PA)	%	66	70	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	█ 0.9	█ 1	---	---
Nitration (PA)	%	59	68	---	---
Sulfation (PA)	%	59	63	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 8	█ 11	---	---
Sodium	ppm	█ 2	█ 3	---	---
Potassium	ppm	█ 6	█ 6	---	---

WEAR METALS

Iron	ppm	█ 23	█ 27	---	---
Copper	ppm	█ 54	█ 70	---	---
Lead	ppm	█ <1	█ 2	---	---
Tin	ppm	█ <1	█ <1	---	---
Aluminum	ppm	█ 1	█ <1	---	---
Chromium	ppm	█ <1	█ 1	---	---
Molybdenum	ppm	█ 2	█ 10	---	---
Nickel	ppm	█ 1	█ 1	---	---
Titanium	ppm	█ 0	█ <1	---	---
Silver	ppm	█ 0	█ <1	---	---
Manganese	ppm	█ <1	█ 2	---	---
Vanadium	ppm	<1	<1	---	---

ADDITIVES

Calcium	ppm	█ 2144	█ 1953	---	---
Magnesium	ppm	39	176	---	---
Zinc	ppm	█ 1271	█ 1100	---	---
Phosphorus	ppm	█ 1048	█ 893	---	---
Barium	ppm	█ 0	█ 0	---	---
Boron	ppm	█ 171	█ 120	---	---

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T:
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Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: VP154879

Unique No: 10832030

Signed: Jonathan Hester

Report Date: 17 Jan 2024

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GRAPHS

